CLAIMS

1. (Previously Presented) The method of claim 2, further comprising:

forming a shallow cup in the part or sub assembly of the semiconductor processing tool; and

placing the identification tag in the cup.

2. (Previously presented) A method of employing at least one identification tag to determine the presence or absence of a part or sub assembly of a semiconductor process tool, comprising:

attaching the identification tag to the part or sub assembly of the semiconductor processing tool, the identification tag comprising a passive resonant circuit that is responsive to radio frequency energy;

applying a radio frequency signal to the identification tag, which creates a measurable decrease in field strength in at least a portion of the radio frequency signal;

determining the presence or absence of the decreased field strength; and

determining the presence or absence of the part of assembly based on the presence or absence of the decreased field strength.

3. (Original) The method of claim 2, wherein the attaching includes adhering the identification tag to the part of sub assembly with adhesive.

4. (Previously Presented) The method of claim 2, wherein the attaching includes affixing the identification tag to the part or sub assembly by means of a mechanical fastener.

5. (Previously Presented) The method of claim 2, further comprising:

applying a swept radio frequency signal to the identification tag;

measuring the decrease in field strength through a voltage change in a sensing coil; and

determining the presence or absence of the part or assembly based on the presence or absence of the decrease in field strength in the coil voltage.

6. (Previously Presented) A method of detecting the presence or absence of a plurality of identification tags including a passive resonant circuit that is responsive to the radio frequency energy, the method comprising:

applying a swept radio frequency signal to the plurality of identification tags;

measuring at least two decreases in field strength in at least a portion of the swept radio frequency via a sensing coil, the at least two decreases in field strength being associated with the presence of at least two decreases in field strength in the sensing coil voltage with the at least two identification tags;

wherein the at least two identification tags are constructed to be resonant at different frequencies.

7. (Previously Presented) A method of identifying a part or assembly in a semiconductor processing tool, the part or assembly having an identification tag attached, the tag including a passive resonant circuit that is responsive to radio frequency energy, the method comprising:

applying a swept radio frequency signal to the part or assembly having an identification tag attached;

measuring a decrease in field strength in at least a portion of the swept radio frequency via a voltage change in a sensing coil;

determining a frequency at which the decreased field strength in coil voltage is present; and

determining the presence or absence of the part or assembly based on the presence or absence of the decreased field strength at the determined frequency.

8. (Previously Presented): A method of identifying parts or assemblies in a semiconductor processing tool, the parts or assemblies each having an identification tag attached, each identification tag be including a passive resonant circuit that is responsive to radio frequency energy, comprising:

applying a swept radio frequency signal to the parts or assemblies having identification tags attached;

measuring decreases in field strength in at least a portion of the swept radio frequency via a voltage change in a sensing coil;

associating the decreased field strengths in sensing coil voltage with each identification tag; and

determining the presence or absence of the parts or assemblies from frequencies at which the dips occur,

wherein each of the plurality of identification tags is constructed to be resonant at different frequencies.

9. (Previously Presented): An assembly comprising:

a part or assembly of a semiconductor processing tool; and

an identification tag attached to the part or assembly, the tag including a passive resonant circuit that is responsive to radio frequency energy of a particular frequency,

wherein, upon application of the radio frequency energy to the identification tag, the identification tag creates a measurable decrease in field strength in at least a portion of the radio frequency energy at the particular frequency so that the presence or absence of the part or assembly may be determined from the presence or absence of the decreased field strength.

10. (Previously Presented): An semiconductor processing tool comprising:

a processing chamber;

a plurality of parts or assemblies attached to or disposed in the processing chamber; and

an identification tag attached to each of the parts or assemblies, each of the tags including a passive resonant circuit, wherein

at least two of the identification tags are responsive to radio frequency energy of a different frequency so that, upon application of the radio frequency energy, the identification tags create at least two measurable decreases in field strength in at least a portion of the radio frequency energy at the different frequencies, the at least two field strength decreases being associated with the presence of at least two from the identification tags.

11 . (Previously Presented): The method of claim 6, wherein each identification tag is

constructed to be resonant at different frequencies.

12. (Previously Presented): The semiconductor processing tool of claim 10, wherein each identification tag is responsive to radio frequency energy at a different frequency.